Off-Site Source Recovery Project
Progress Report -- First Quarter FY 2003

Executive Summary

In the first quarter of FY 2003, Offsite Source Recovery Project activities included recovering 919 excess sealed sources. The contractor has costed $472K of a $10,000K appropriation through direct labor, and has obligated an additional $2,217K in purchase orders for multi-function containers required for sealed source recovery activities. The Project also committed $1,370K for FY 2003 on-site support service work. Proactive plutonium-239 source recovery remains on hold, with two issue-resolving recommendations awaiting review and approval at DOE Headquarters. LANL also must identify and arrange storage capability for plutonium-239 sources while they are in the LANL inventory.

Project Title:	Off-site Source Recovery (OSR) Project
Headquarters Program:	Office of Environmental Management (EM), EM-22
Work Authorization:	Office of Nonproliferation and International Security, NA-241 B&R Code NN4001012
Field Element:	National Nuclear Security Administration (NNSA) Service Center (Albuquerque)
Site Operations:	Los Alamos National Laboratory (LANL)

Background: This report covers the period October 1, 2002 through December 31, 2002. A September 19, 2002, NNSA work authorization provided the OSR Project with an additional $10 million obligation in FY 2002 funding and a Statement of Work (SOW). The SOW addresses accelerating domestic excess sealed source recovery by the OSR Project at LANL.

Management Activities: The additional funding is integrated with work funded through EM Project Baseline Summary activities AL-026 and AL-032. The project contractor, The University of California (UC), conducts most of the work at LANL. UC completed a Baseline Change Proposal (BCP) in December 2002. UC will submit the BCP to the NNSA Service Center (Albuquerque) Waste Management Division documenting the accelerated project scope, cost and schedule. Concurrently, on-going field activities are addressing the accelerated recovery mission.

UC has developed a cost plan to spend approximately $8 million of the $10 million in FY 2003 and $2 million in FY 2004. Project activities have costed $472K against the plan in the first quarter of FY2003. Increased spending in the second, third, and fourth quarters will result from equipment procurement accruals and additional project staff labor.

1) **Procurements:** UC placed orders for all multi-function containers anticipated to be required through FY 2004. This purchase is necessary to provide an adequate number of containers. The purchase includes 510 S100 Pipe Overpack Assemblies for high-activity neutron sources, and 150 Standard 12-inch Pipe Overpack Assemblies for other sources. These procurements obligate $2,217K. In addition, contract modifications were negotiated with an OSR Project subcontractor to enhance operational capability. The estimated cost is $750K.

2) **Work Packages:** OSR Project staff negotiated Work Packages (task orders) with various internal UC/LANL groups. The Work Packages are required for receiving radioactive material and

conducting radiological operations at LANL. The activities commit approximately $1,370K in FY 2003. They include:

a) Hot Cell support for radioactive material receipt, handling, and repackaging
b) Engineering Support for tools, testing, and equipment
c) Radiological Technician support
d) Security and Material Control and Accountability activities
e) Quality assurance
f) Waste management support for radioactive source handling and storage
g) Radiological Transportation Group Support for shipping empty containers to off-site locations prior to recoveries and receiving packaged sources at LANL.

3) **Staffing:** The OSR Project is increasing UC staff resources by approximately 2.5 FTE's for the duration of accelerated activities.

Operational Activities: Since October 1, 2002, the UC operations team has been planning and executing off-site operations for sealed source recoveries. Recoveries through December 2002 include:

- 919 excess sealed sources containing transuranic isotopes recovered, packaged as TRU waste, and stored at LANL.
- 7 sites recovered– 2 universities, 1 EPA Superfund Site, 1 hospital, and 3 commercial firms.

Actual Costs: Project costs for the first quarter of FY 2003 total $472K, with an additional $2,217K committed toward purchasing shipping containers.

Concerns and Obstacles: Determining an acceptable management approach for storing plutonium-239 neutron sources at LANL remains an unresolved issue that continues to delay timely recovery.

Specific issues are:

1) Approval to discard special nuclear material contained in plutonium-239 sealed sources is in headquarters review, pending approval by EM and DOE's Office of Security.
2) Approval to dispose all domestic plutonium-239 sources as defense TRU waste at the Waste Isolation Pilot Plant (WIPP) is pending approval at EM.
3) Designating an appropriate storage facility for managing accumulated plutonium-239 sealed sources prior to disposal.

A long-term issue that the program must resolve is the long-term need for disposal of OSR Project sealed sources and all other GTCC waste

Up-Coming Activities: UC plans sealed source recovery activity at two medical facilities and two universities in January 2003. In February, UC will recover and package approximately 750 americium neutron sources at two high-priority sites in Texas.